



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/649,046

Filing Date: August 27, 2003

Applicant: Berger

Entitled: SELF-ALIGNED AND SELF-LIMITED QUANTUM DOT  
NANOSWITCHES AND METHODS FOR MAKING SAME

Art Unit: 2811

Examiner: Nadav

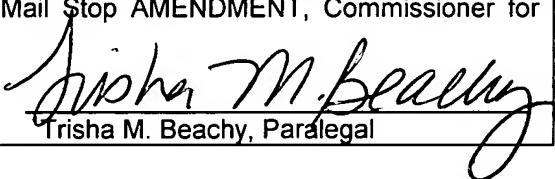
Docket No.: OSU1159-166B

Mail Stop AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8 (A)

Date of Deposit: October 21, 2004

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail in an envelope addressed to Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Trisha M. Beachy, Paralegal

Sir:

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

As authorized and encouraged under 37 CFR §§ 1.97-1.98 and the provisions of MPEP §§ 609 and 707.05 (b), Applicant submits herewith certain supplemental patent references, publications and/or other information which the Patent and Trademark Office may wish to consider in examining the above-identified patent application. The references and information are listed below and on attached form PTO-1449.

10/26/2004 27UHAR1 00000448 10649046  
01 FC:1806

OTHER DOCUMENTS

1. Amlani, I. et al., Digital Logic Gate Using Quantum-Dot Cellular Automata, *Science*, 284, pp. 289-291 (April 9, 1999).
2. Fay, P. et al., Integration of InAs/A1Sb/GaSb Resonant Interband Tunneling Diodes with Heterostructure Field-Effect Transistors for Ultra-High-Speed Digital Circuit Applications, *IEEE*, pp. 162-165 (1999).
3. Fay, P. et al., A New Integrated Laboratory Course for Microwave Circuit Design and Measurements, *International Conference on Engineering and Computer Education*, Rio de Janeiro, 4 pages (August, 1999).
4. Klimeck, G. et al., Development of a Nanoelectronic 3-D (NEMO 3-D) Simulator for Multimillion Atom Simulations and Its Application to Alloyed Quantum Dots, 35 pages (January 7, 2002).
5. Nayak, D. et al., Rapid Thermal Oxidation of GeSi Strained Layers, *Appl. Phys. Lett.*, 56, pp. 66-68 (January 1, 1990).

A copy of each document is included for the express purpose of providing the Patent and Trademark Office with ample opportunity to evaluate the same and arrive at an independent assessment of the materiality of each, if any, to the examination of the above-identified application.

In reviewing the enclosed copies of the above documents, the Examiner is instructed to ignore any underscoring or highlighting which may have been done because such markings may or may not have any relationship to the subject matter of the above-

identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

The identification of any document herein is not intended to be, and should not be understood as being, an admission that each such document, in fact, constitutes "prior art" within the meaning of applicable law.

Applicant submits this statement in accordance with their duty of disclosure under 37 C.F.R. §1.56. This statement is filed in accordance with 37 C.F.R. 1.97(c), after the mailing date of a first Office Action on the merits, but before the mailing date of either a final action or a Notice of Allowance.

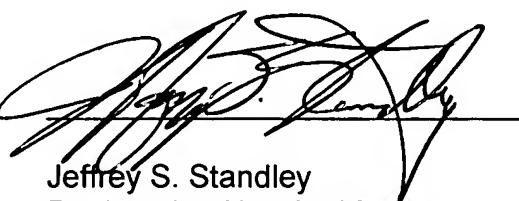
This Information Disclosure Statement is accompanied by a fee as required by 37 C.F.R. 1.97(c) in the amount of \$180.00 as set forth in 37 C.F.R. 1.17(p).

Applicant respectfully requests that the documents cited herein be made of record in the normal manner and that such documents appear on the printed patent as being considered and made of record.

Respectfully submitted,

Date: 10-21-04

By:



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**FORM PTO-1449 TO BE FILED WITH  
INFORMATION DISCLOSURE STATEMENT**

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U.S. Department of Commerce	:	Atty. Docket No.: OSU1159-166B
Patent and Trademark Office	:	Serial No.: 10/649,046
	:	Filing Date: August 27, 2003
SUPPLEMENTAL INFORMATION	:	Applicant: Berger
DISCLOSURE STATEMENT	:	Group Art Unit: 2811
BY APPLICANTS	:	Examiner: Nadav

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**OTHER DOCUMENTS**

1. Amlani, I. et al., Digital Logic Gate Using Quantum-Dot Cellular Automata, *Science*, 284, pp. 289-291 (April 9, 1999).
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Examiner	Date Considered
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Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

The identification of any document herein is not intended to be, and should not be understood as being, an admission that each such document, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given document may have a later effective date than at first seems apparent or the document may have an effective date which can be antedated. The "prior art" status of any document is a matter to be resolved during prosecution.